

# Best Management Practices

MISSOURI DEPARTMENT OF CONSERVATION



## Crystal Darter

*Crystallaria asperella*

**Common name** • Crystal Darter

**Scientific name** • *Crystallaria asperella*

**State status** • Endangered

→ Erosion and sediment controls should be implemented, maintained and monitored for the duration of the project.

### Ecology

Crystal darters have a large historic range, stretching from river basins in West Virginia west to Missouri and from Minnesota south to the Gulf of Mexico. In east-central to southeastern Missouri, they inhabit open channels of large, clear streams with low to moderate gradients and long stretches of silt-free sand and small gravel substrate. They prefer streams with strong current and water depths of about 3 feet. The biology of this darter in Missouri is poorly known. Studies suggest that darters may bury themselves in the sand during the day and become active at night. Crystal darters forage for mainly aquatic insects, especially midges, blackflies and caddisflies. Adults are commonly about 6.5 inches in length. They most likely breed in early spring.

### Reasons for Decline

Despite an historical range that included many rivers throughout east-central and southeastern Missouri, crystal darters never were considered common. Population declines have occurred as a result of habitat modification from activities such as channelization, dredging and impoundments. Crystal darters are particularly affected by these practices because they increase siltation, which affects how darters hunt for food.

### Specific Recommendations

As a species that prefers clean and unpolluted streams, crystal darters may act as indicators of a healthy ecosystem. Restoring and protecting streams for the crystal darter also will benefit other aquatic species.

→ Dams and other impoundments should be prohibited in streams throughout the crystal darters range.

→ Project activities should not occur below the high water level of the stream between March 15 and June 15.

→ Avoid removing and altering the riparian corridor along streams.

### General Recommendations

Refer to Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers.

### Information Contacts

For further information regarding regulations for development in rivers and streams, contact:

Missouri Department of Conservation  
Policy Coordination Section  
P.O. Box 180  
2901 W. Truman Blvd  
Jefferson City, MO 65102-0180  
Telephone: 573/751-4115

Missouri Department of Natural Resources  
Division of Environmental Quality  
P.O. Box 176  
Jefferson City, MO 65102-0176  
Telephone: 573/526-3315

U.S. Army Corps of Engineers  
Regulatory Branch  
700 Federal Building  
Kansas City, MO 64106-2896  
Telephone: 816/983-3990

U.S. Environmental Protection Agency  
Water, Wetlands, and Pesticides Division  
901 North 5th Street  
Kansas City, KS 66101  
Telephone: 913/551-7307

U.S. Fish and Wildlife Service  
Ecological Services Field Office  
608 E. Cherry Street, Room 200  
Columbia, MO 65201  
Telephone: 573/876-1911

### Disclaimer

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